

# REQUEST FOR ACCESS OF ABANDONED APPLICATION UNDER 37 CFR 1.14(a)

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In re Application of

Reiffin

Application Number

06/719,507

Filed

4-3-85

Group Art Unit

Examiner

Paper No. 448

Assistant Commissioner for Patents  
Washington, DC 20231

I hereby request access under 37 CFR 1.14(a)(3)(iv) to the application file record of the above-identified ABANDONED application, which is: (CHECK ONE)

- ☒ (A) referred to in United States Patent Number 5,694,603 column 1
- ☐ (B) referred to in an application that is open to public inspection as set forth in 37 CFR 1.11, i.e., Application No. \_\_\_\_\_, filed \_\_\_\_\_, on page \_\_\_\_\_ of paper number \_\_\_\_\_
- ☐ (C) an application that claims the benefit of the filing date of an application that is open to public inspection, i.e., Application No. \_\_\_\_\_, filed \_\_\_\_\_, or
- ☐ (D) an application in which the applicant has filed an authorization to lay open the complete application to the public.

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US005694603A

**United States Patent** [19]

Reiffin

[11] Patent Number: 5,694,603

[45] Date of Patent: Dec. 2, 1997

**[54] COMPUTER MEMORY PRODUCT WITH  
PREEMPTIVE MULTITHREADING  
SOFTWARE****[76] Inventor:** Martin G. Reiffin, 5439 Blackhawk  
Dr., Danville, Calif. 94526**[21] Appl. No.:** 496,282**[22] Filed:** Mar. 20, 1990**Related U.S. Application Data****[63]** Continuation of Ser. No. 425,612, Sep. 28, 1982, abandoned,  
and Ser. No. 719,507, Apr. 3, 1985, abandoned.**[51] Int. Cl.<sup>6</sup>** ..... G06F 9/46**[52] U.S. Cl.** ..... 395/677**[58] Field of Search** ..... 395/800, 375,  
395/650, 677, 678**[56] References Cited****U.S. PATENT DOCUMENTS**

3,614,745	10/1971	Poduin	395/650
4,084,228	4/1978	Dufond et al.	395/650
4,383,307	5/1983	Gibson, III	395/575
4,513,391	4/1985	Maddock	395/146
4,671,684	6/1987	Kojima et al.	400/63
4,724,285	2/1988	Lefler et al.	178/21
4,773,009	9/1988	Kucera et al.	364/419
4,887,212	12/1989	Zamora et al.	364/419

**OTHER PUBLICATIONS**Hiromoto, Robert, *Parallel-processing a large scientific  
problem*, AFIPS Press, 1981, pp. 235-237.Ousterhout, John K., *Scheduling techniques for Concurrent  
Systems*, IEEE, 1982, pp. 22-30.Andrews, Gregory R., *Synchronizing Resources*, ACM  
Transactions on Programming Languages and Systems, vol.  
3, No. 4, Oct. 1981, pp. 405-430.Collin, A. J. T., *The Implementation of STAB-I*, Software—  
Practice and Experience, vol. 2, 1972, pp. 137-142.Artym, Richard, *The STAB Multiprocessing Environment for  
CYBA-M*, Software—Practice and Experience, vol. 12,  
1982, pp. 323-329.Treleven et al., *Combining Data Flow and Control Flow  
Computing*, The Computer Journal, vol. 25, No. 2, 1982, pp.  
207-217.Duffie, C. A. III, *Task Scheduling Algorithm for a Telepro-  
cessing Communications Controller*, IBM Technical Disclo-  
sure Bulletin, vol. 16, No. 10, Marcy 1974, pp. 3349-3352.Hoare, C. A. R., *Towards a Theory of Parallel Program-  
ming*, Operating Systems Techniques, Proceedings of a  
Seminar held at Queen's University, Belfast, 1972, Aademic  
Press, 1972, pp. 61-71.Cheriton, David Ross, *Multi-Process Structuring and the  
Thoth Operating System*, Doctoral Thesis, University of  
Waterloo, 1978.Redell et al., *Pilot: An Operating System for a Personal  
Computer*, Communications of the ACM, Feb. 1980, vol. 23,  
No. 2, pp. 81-92.Lampson et al., *Experience with Processes and Monitors in  
Mesa*, Communications of the ACM, Feb. 1980, vol. 23, No.  
2, pp. 105-117.Hughes, Lawrence, E., "System Programming Under  
CP/M-80," 1983, pp. 109-112 and 127-138.**Primary Examiner**—Richard L. Ellis**[57] ABSTRACT**

A multithreading computer system for the preemptive asyn-  
chronous concurrent execution of a plurality of instruction  
threads of a multithreaded application program. As an illus-  
trative example of one of the many uses of the invention, the  
disclosed application program comprises a compiler thread  
and an editor thread. The compiler processes the source code  
while the programmer edits the source code at the keyboard.  
An interrupt service routine repeatedly activates the editor  
thread to provide a preemptive asynchronous editing process  
for either entry of new source code or modification of the  
previously entered code, while the compiler thread concu-  
rently processes the source code during the time intervals  
between keystrokes. The interrupt service routine may be  
activated either by a keyboard interrupt or periodically by a  
clock at predetermined time intervals.

**41 Claims, 9 Drawing Sheets**